

The genus *Cystingea* with its terminal cloacal opening, so far as the disposition of its alimentary canal is concerned, agrees rather with the characters given in the left-hand column; but in nearly all other particulars, as may be gathered from Mr. W. S. Macleay's beautiful description, its affinity to *Boltenia* can scarcely be questioned.

EXPLANATION OF PLATE XI.

Fig. 1. *Chondrostachys*, natural size.

Fig. 2. One of the zooids, with a portion of the axis magnified: *a*, branchial, and *b*, cloacal orifice; *c*, branchial network; *d*, endostyle; *e*, pseudo eye-speck; *f*, mouth; *g*, œsophagus; *h*, stomach; *i*, intestinal loop; *k*, rectum; *l*, heart; *m*, ovarium; *n*, ova occupying a sacculus of the duct (two others are seen in the branchial chamber); *o*, testis; *p*, vas deferens; *q*, pallio-vascular process leading into the stem.

Fig. 3. Transverse section of stem.

Fig. 4. Longitudinal section of the same, on a larger scale.

Fig. 5. Cæcal end of one of the tubules, more highly magnified.

Fig. 6. Ventral surface of a zooid removed and laid out to show the relation of the pseudo eye-specks *a a* to the ganglion *b*; *c*, branchial, and *d*, cloacal aperture; *e*, some of the oral tentacula protruding inferiorly.

Fig. 7. Tadpole-like embryo within the ovum (one of the three suckers, being situated upon the dorsal aspect, does not present itself in this view): *a*, otolithic sacs.

Fig. 8. Enlarged figure of the otolithic sacs lying upon the ganglion: *a*, otolithes separated from the investing pigment-granules.

XXXVII.—On the Affinities of the genus *Camptonyx*, *Benson*.

By Dr. GRAY, F.R.S. &c.

THERE can be little doubt that this genus is a new form of amphibious mollusk, characterized by its cap-like shell, with a groove and keel on the side; but I think, from the account of the position of the eyes, the shape of the tentacles, and the form of the muzzle, as well as the peculiar colour of the shell, that it is much more nearly allied to *Otina* than to *Ancylus*, with which Mr. Benson compares it.

Otina is nearly as terrestrial; it lives among *Lichina* on rocks near the sea, sometimes within reach of the spray, and more rarely in parts covered by the water at very high tides; but it is essentially terrestrial; and as many plants are common to the sea-shore and mountains, the difference between the habitat of *Otina* and *Camptonyx* is not very great.

tween *Clavelina* and *Syntethys*. The relation of the intestine to the branchial sac in *Chondrostachys* removes it from that group of Ascidiæ to which *Boltenia* belongs.—Ed.]

